

## What is claimed is:

**[Claim 1]** 1. A method for handling an interrupt request in an optical storage drive when the optical storage drive executes a control procedure or operation, the method comprising:

- utilizing the optical storage drive to receive an interrupt request from a control circuit;
- checking whether the interrupt request is a read command;
- if the interrupt request is a read command, checking whether data indicated by the read command is stored in a buffer; and
- if the indicated data is stored in the buffer, transferring the corresponding data to the control circuit from the buffer to respond to the interrupt request.

**[Claim 2]** 2. The method of claim 1, wherein the buffer is a volatile memory of the optical storage drive.

**[Claim 3]** 3. The method of claim 1, wherein the buffer is a register of the optical storage drive.

**[Claim 4]** 4. The method of claim 1, wherein the control circuit is a host computer.

**[Claim 5]** 5. The method of claim 1, further comprising:

- if the data indicated by the read command is not stored in the buffer, suspending handling the interrupt request.

**[Claim 6]** 6. A storage medium for storing program code used to control an optical storage drive to perform the following steps while executing a control procedure or operation:

receiving an interrupt request from a control circuit;  
checking whether the interrupt request is a read command;  
if the interrupt request is a read command, checking whether data indicated by the read command is stored in a buffer; and  
if the indicated data is stored in the buffer, transferring the corresponding data to the control circuit from the buffer to respond to the interrupt request.

[Claim 7] 7. The storage medium of claim 6 being a non-volatile memory.